## **Accident Prevention<sup>1</sup>**

William J. Becker<sup>2</sup>

The major agents of injury, types of accidents, nature and part of the body injured by workers in Florida agriculture are detailed in An Analysis of Agricultural Accidents in Florida. If we understand what is happening, "accident-wise", to our agricultural workforce, we ought to be able to place our efforts in accident prevention on the proper targets.

## AGRICULTURAL ACCIDENT PREVENTION

What are our problems? What prevention tactics can we employ?

If we wish to address the work-related fatalities, we have three major accident types that, year after year, cause the majority of those fatalities: tractor and machinery accidents, vehicle accidents, and electrocution.

## Major Safety Practices Which Should be Implemented and Enforced to Prevent Fatalities

- Tractors should be equipped with rollover protective structures (ROPS) and seat belts. Operators should be required to wear the seat belts.
- All guards and shields should be in place.
- Tractors should be shut off every time the operator leaves the seat and, certainly, before machines are serviced, adjusted or unclogged.

- Permit NO RIDERS on tractors, machinery or on the outside of vehicles.
- All vehicles should be properly maintained and equipped with safety belts. Operators and passengers must wear the safety belts.
- All vehicle operators must have a valid driver's license; many need a commercial driver's license, and they and tractor drivers must be trained, then retrained, annually.
- When repairing electrical systems or equipment, the electrical power must be locked out.
- Caution workers, and provide close supervision, whenever work must be done near high power lines.

The major agents of injury are working surfaces, heavy objects and motor vehicles. These three agents cause over 50 percent of all serious injuries. Two major types of accidents are overexertion (lifting, pushing and pulling) and falls: these account for over 50 percent of all serious injuries. The result is that nearly 50 percent of all injuries are sprains and strains to the back and the major body joints: the shoulder, elbow and wrist, the hip, knee and ankle.

## Major Safety Practices Which Should be Implemented and Enforced to Prevent Serious Injuries

The Institute of Food and Agricultural Sciences is an equal opportunity/affirmative action employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap, or national origin. For information on obtaining other extension publications, contact your county Cooperative Extension Service office.

Florida Cooperative Extension Service / Institute of Food and Agricultural Sciences / University of Florida / John T. Woeste, Dean

This document was published 11/91 as Fact Sheet AE-92, Florida Cooperative Extension Service. For more information, contact your county Cooperative Extension Service office.

<sup>2.</sup> Professor and Extension Safety Specialist, Agricultural Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences (IFAS), University of Florida, Gainesville, Florida.

Accident Prevention Page 2

- Working surfaces should be dry, free of objects and conditions which could cause falls, and be welllighted.
- Mechanical devices should be used to lift heavy objects and repetitive lifting, carrying or handling of materials should be mechanized. Forklifts, loaders, conveyors, etc. should be used in place of "back power" whenever possible.
- Jobs and work stations should be redesigned to eliminate repetitive reaching, pulling, pushing and lifting activities.
- Workers should be taught proper posture and movement for their tasks, and supervisors should insist that unsafe posture and movement will not be accepted.

- Supervisors must accept a greater responsibility for the safety of their employees. They must enforce safety rules and regulations and safe work practices. They must correct unsafe work practices when they occur.
- Workers must be instructed on the proper way to get on and off a tractor or bed of a truck and how to go up and down ramps, ladders and stairs.
- Workers must be forced to wear safe footwear and other protective clothing and gear needed for the job.

As long as we continue to permit workers to work in unsafe environments, expect them to do repetitive tasks at a poorly designed work station, permit them to do the task "their" way rather than the safe way, and permit them to wear any "old or new" type of shoes, we will never solve our lifting-pushing-pulling-reaching-sliptrip-fall or repetitive-type accident problems. And sprains and strains to the backs, arms and legs of our workers will continue to disrupt work schedules, increase workers' compensation costs, cause morale problems and result in trauma to the worker and the workers' families.